

6 of the sheet 2 so as to project through the opening 16, with the flange 38 abutting the side 6 of the sheet 2. The flange 38 is then fused to the side 6 of the sheet 2. When the preform 2 is folded about the fold line 8, the opening 14 is brought into registry with the polyurethane coated surface 6 of the preform 2. The hook component 30, as seen in FIG. 1, has its hook surface 32 facing downwardly, and has its polymer coated surface 34 facing upwardly, toward the polymer coated surface 6 of the preform 2. In assembling the cuff, the hook component 30 has its coated surface 34 pressed against the preform coated surface 6 through the opening 14, and is then heat fused to the preform surface 6. The hook component 30 is thus secured to the cuff, opposite the loop components 18 and 20. The dimensions of the hook component 30 equal, or are slightly smaller than the those of the opening 14 so that the hook component 30 covers the opening 14.

Referring to FIGS. 3 and 4, details of the assembled cuff 40 are shown. It will be noted that the loop components 18 and 20 are accessible on one side of the cuff 40, and the hook component 30 is accessible on the opposite side of the other end of the cuff 40. The edges of the cuff 40, at 42, are sealed together to form an internal inflatable chamber 44, with which chamber the fitting 36 communicates. It will be noted that the fold 8 forms one edge of the chamber 44. FIG. 4 also clearly illustrates the manner in which the patch 22 is sealed to the polyurethane coated surface of the cuff 40.

FIG. 5 shows the cuff 40 looped about itself for affixation to a patient's limb, wherein the hook component 30 is brought into contact with the loop components 18 and 20.

It will be readily appreciated that the cuff of this invention is of simple construction, easy to assemble and reliable. The inflation chamber is not compromised by the securement of the fastening components to the cuff. The particular polymers used for the coatings are selected for their ability to seal the cuff against air permeability, and should be heat fusible.

Since many changes and variations of the disclosed embodiment of the invention may be made without departing from the inventive concept, it is not intended to limit the invention otherwise than as required by the appended claims.

What is claimed is:

1. An inflatable blood pressure cuff formed from a woven fabric sheet having one surface thereof coated with a fusible polymer to render the fabric impermeable to air, said coated sheet surface forming the interior of the cuff, and said sheet being folded upon itself to bring said coated sheet surface into contact with itself, said cuff including an inflatable chamber bounded by edges of said coated sheet surface which edges are fused together; said chamber having one side thereof formed with a cut window therein; and a first hook and loop fastener component mounted on a path of fusible polymer-coated woven fabric by being bonded to a coated surface, said patch being disposed in said chamber with said fastener component protruding through said window, and said patch having edges of said coated surface thereof fused to said coated sheet surface to seal said window thereby sealing the edges of said window

against passage of air; said cuff including a second fastener component thereon.

2. The blood pressure cuff of claim 1 wherein said fusible polymer is polyurethane.

3. The blood pressure cuff of claim 2 further comprising a polyurethane inflation fitting having a basal flange fused to said coated surface of said sheet in said chamber, said fitting having a tubular portion thereof projecting through an opening in a side of said chamber to access said chamber to an inflation device.

4. The blood pressure cuff of claim 3 wherein said inflation fitting is disposed on a fold line forming one edge of the cuff.

5. The blood pressure cuff of claim 1 further comprising a second hook and loop fastener component complementary to said first component, said second component being bonded to said coated surface of said sheet and accessible from the exterior of the cuff for securement to said first component.

6. A method for forming an inflatable blood pressure cuff from a fabric material having one surface thereof coated with a fusible polymer operable to render the fabric material impermeable to air, said method comprising the steps of:

- a) providing a preform sheet of said material;
- b) cutting a first window in said preform sheet;
- c) providing a patch of said material;
- d) positioning said patch over said window with the coated surfaces of said preform sheet and said patch in face-to-face contact with each other, and fusing said coated surfaces together to close and seal said window;
- e) providing a first hook and loop fastener component with a backing surface thereof coated with said fusible polymer and bonding said first fastener component to said patch through said window by fusing said backing surface to the coated surface of said patch; and
- f) folding said preform sheet about a mid line to bring the coated surface on one half thereof into face-to-face contact with the coated surface on the other half thereof, and fusing edges of the coated surface of said halves together to form an internal air tight inflatable chamber for the cuff.

7. The method of claim 6 comprising the further steps of cutting a second window in said preform sheet to expose a portion of said coated surface of said preform sheet after said folding step; providing a second hook and loop fastener component complementary to said first component, said second component having a backing surface thereof coated with said fusible polymer; and bonding said second component to said folded preform sheet by fusing said second component backing surface to said portion of said coated surface of said preform through said second window.

8. The method of claim 6 comprising the further steps of cutting an opening in said preform sheet at said mid line thereof; providing a tubular fitting having a basal flange and formed from the fusible polymer; positioning the fitting in said opening with its flange abutting the coated surface of the preform sheet; and fusing the flange to the coated surface of the preform sheet to form a sealed inflation fitting communicating with the chamber in the cuff.

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